Listing of the Claims:

Claims 1-20 (Cancelled).

21. (Currently amended) A multiple channel system for a twisted pair telephone wire local loop system, comprising:

a subscriber gateway system having ~~an n-channel~~ a first transceiver ~~connected~~ coupled to the twisted pair telephone wire, the ~~n-channel~~ first transceiver ~~sending~~ to send and ~~receiving~~ receive via multiple independent channels~~, wherein the n-channel transceiver has a plurality of digital demodulators~~;

~~an n-channel~~ a second transceiver at a central office ~~connected~~ coupled to the twisted pair telephone wire, the second ~~n-channel~~ transceiver to send and receive via the ~~sending and receiving~~ multiple independent channels ~~wherein n is greater than two~~; and

a plurality of digital filters, operatively coupled to the first and second transceivers, to convey a signal via an available frequency band associated with the multiple independent channels~~; and~~

~~a local circuit switch connected to an output of the n-channel transceiver at the central office~~.

22. (Currently amended) ~~The system of claim 21~~ A multiple channel system as defined in claim 21, further comprising ~~including~~ a digital subscriber line access multiplexer ~~connected~~ coupled to ~~the~~ an output of the second transceiver ~~n-channel receiver at the central office~~.

23. (Cancelled).

24. (Currently amended) ~~The system of claim 21~~ A multiple channel system as defined in claim 21, wherein each ~~of the outputs~~ of the plurality of digital filters has an output, and wherein each of the outputs is to be summed by a summer.

25. (Currently amended) ~~The system of claim 21, wherein the~~ A multiple channel system as defined in claim 21, further comprising a plurality of digital demodulators and a plurality of digital modulators ~~are implemented in a digital signal processor~~ coupled to the digital filters.

26. (Cancelled).

27. (Currently amended) A method of operating a bandwidth allocation system for a twisted pair telephone wire local loop system, comprising ~~the steps of~~:

~~(a)~~ receiving a bandwidth allocation request at an office controller;

determining if a frequency band is available on a selected twisted pair telephone wire;

when the frequency band is available, determining a filter scheme and a frequency translation scheme to convey a signal via the available frequency band;

transmitting the filter scheme and the frequency translation scheme to a subscriber controller; and

sending a bandwidth allocation available message via the office controller.

~~(b) selecting an unused section of frequency;~~

~~(c) determining if the unused section of frequency has sufficient bandwidth;~~

~~(d) when the unused section of frequency has sufficient bandwidth, performing a link quality analysis; and~~

~~(e) when the link quality analysis~~ meets a threshold ~~is greater than a predetermined minimum, defining the unused section of frequency as available.~~

28. (Cancelled).

29. (Currently amended) A bandwidth allocation system for a twisted pair telephone wire local loop system, comprising:

a subscriber digital filter system ~~connected~~ coupled to the twisted pair telephone wire;

a subscriber controller to send a control signal to the subscriber digital filter system;

an office digital filter system ~~connected~~ coupled to the twisted pair telephone wire; and

an office controller ~~sending~~ to send a control signal to the office digital filter system~~, wherein the office controller receives a bandwidth allocation request and calculates a digital filter coefficients necessary to realize a digital filter to satisfy the bandwidth allocation request~~ to cause the digital filter system to convey a signal via an available frequency band.

30. (Cancelled).

31. (Cancelled).

32. (Previously presented) ~~The system of claim 29~~ A bandwidth allocation system as defined in claim 29, further comprising ~~including~~ a subscriber transceiver coupled to the subscriber controller and the subscriber filter system.

33. (New) A bandwidth allocation system as defined in claim 29, further comprising a splitter ~~connected~~ coupled to the twisted pair telephone wire and having a low pass output ~~connected~~ coupled to a plain old telephone system telephone and a high pass output ~~connected~~ coupled to the subscriber digital filter system.

34. (New) A bandwidth allocation system as defined in claim 29, wherein the office controller is to receive a bandwidth allocation request and to calculate digital coefficients used to program a digital filter to enable the bandwidth allocation request.

35. (New) A bandwidth allocation system as defined in claim 34, wherein the office controller is to transmit the digital filter coefficients to the office digital filter system.

36. (New) A bandwidth allocation system as defined in claim 34, further comprising a control channel to convey control information between the subscriber controller and the office controller.

37. (New) A bandwidth allocation system as defined in claim 36, wherein the office controller is to transmit the digital filter coefficients to the subscriber controller via the control channel.

38. (New) A multiple channel system as defined in claim 21, wherein the first transceiver in the subscriber gateway is to transmit a plurality of frequency division multiplexed signals.

39. (New) A multiple channel system as defined in claim 21, wherein the first transceiver in the subscriber gateway is to transmit a plurality of time division multiplexed signals.

40. (New) A multiple channel system as defined in claim 21, wherein the first transceiver in the subscriber gateway is to transmit a plurality of code division multiplexed signals.

41. (New) A multiple channel system as defined in claim 21, further comprising a local circuit switch coupled to an output of the second transceiver.

42. (New) A method as defined in claim 27, further comprising sending a bandwidth allocation available message via the office controller.